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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/939,289	09/29/97	ROSENSCHEIN	U	027171/014

QM41/0427

STROOCK & STROOCK & LAVAN
180 MAIDEN LANE
NEW YORK NY 10038-4982

EXAMINER
SMITH, K

ART UNIT	PAPER NUMBER
3737	

DATE MAILED: 04/27/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95)

1- File Copy

Office Action Summary

Application No.	Applicant(s)
08/939,289	Rosenschein et al
Examiner	**Group Art Unit**
Ruth S. Smith	3737

☒ Responsive to communication(s) filed on *2/1/99, 2/12/99*.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-41* is/are pending in the application.

Of the above, claim(s) *3, 5-17, 35, 36, and 38-41* is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1, 2, 4, 19-34, and 37* is/are rejected.

☒ Claim(s) *18* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Election/Restriction

Claims 3,5-17,35,36,38-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention/species. Election was made **without** traverse in Paper No. 5. It should be noted that claims 35,36 depend from claim 3 and therefore are included in the claims withdrawn from consideration.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities: On page 17, line 28, "FIG. 22" should be "FIG. 23". Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 26,31,33,37 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 26 is vague and indefinite in view of the operating frequency set forth. In claim 31, "the peak power output" lacks antecedent basis. Claim 33 is vague and indefinite in that "T" has not been defined. Claim 34 is vague and indefinite in that "T" has not been defined. Claim 37 is vague and indefinite in that it fails to set forth an active step in the method and only appears to set forth a structural limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 1,2,4,19,21,33,34,37 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jones. The claims are directly readable on Jones which discloses an invasive ultrasonic probe that produces ultrasound at a pulse repetition period of less than 1000 milliseconds and has a pulse duration of about 1 microsecond.

Claims 19,23 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Chapelon et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 20,22-26,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Guess et al. Jones discloses an ultrasonic treatment device that

is placed within the body. Jones produces ultrasound with a pulse duration of less than 100 milliseconds and a pulse repetition period of less than 1000 milliseconds. Jones operates at a high ultrasonic frequency. Guess et al discloses that it is known to provide a method of ultrasonic treatment using a frequency in the range of 20-40KHz. It would have been obvious to one skilled in the art to have modified Jones such that the operating frequency is lower, for example in the range of 20-40KHz. Such a modification would merely involve substituting one well known operating frequency in a therapeutic ultrasonic probe for another depending upon the desired procedure. With respect to claims 22-25, the specific pulse duration and pulse repetition rates selected would have been an obvious design choice to one skilled in the art without undue experimentation based upon the procedure being performed.

Claims 20,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapelon et al in view of Guess et al. Chapelon et al disclose an ultrasonic treatment device that is placed within the body. It operates with a pulse duration of about 50 milliseconds and at a high frequency. Guess et al discloses that it is known to provide a method of ultrasonic treatment using a frequency in the range of 20-40KHz. It would have been obvious to one skilled in the art to have modified Chapelon et al such that the operating frequency is lower, for example in the range of 20-40KHz. Such a modification would merely involve substituting one well known operating frequency in a therapeutic ultrasonic probe for another depending upon the desired procedure.

Claims 27,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapelon et al or Jones in view of Balamuth. Jones and Chapelon et al each disclose an ultrasonic probe which operates to provide a method of applying therapeutic ultrasound to a location within a body. Balamuth discloses an ultrasonic therapeutic method which the output power of the probe is 15 watts. It would have been obvious to one skilled in the art without undue experimentation to have selected an appropriate operating parameter such as power output that would be most applicable to the

procedure being performed. The selection of a level of 15 watts is well known in the art as being in an appropriate range.

Claims 28-29,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones as applied to claim Guess et al above, and further in view of Balamuth. Balamuth discloses an ultrasonic therapeutic method which the output power of the probe is 15 watts. It would have been obvious to one skilled in the art without undue experimentation to have selected an appropriate operating parameter such as power output that would be most applicable to the procedure being performed. The selection of a level of 15 watts is well known in the art as being in an appropriate range.

Allowable Subject Matter

Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is (703) 308-3063.

Facsimile transmissions should be directed to (703) 305-3590.

RUTH S. SMITH
PRIMARY EXAMINER
ART UNIT 3737

RSS
April 21, 1999